

## Exhibit 300: Capital Asset Plan and Business Case Summary

### Part I: Summary Information And Justification (All Capital Assets)

#### Section A: Overview

**1. Date of Submission:** 2011-02-28

**2. Agency:** 021

**3. Bureau:** 12

**4. Name of this Investment:** FAAXX505: En Route Automation Modernization D Position Upgrade and System Enhancements

**5. Unique Project (Investment) Identifier (UPI):** 021-12-01-11-01-5000-00

**6. What kind of investment will this be in FY 2012?:** Planning

- Planning
- Full Acquisition
- Operations and Maintenance
- Mixed Life Cycle
- Multi-Agency Collaboration

**7. What was the first budget year this investment was submitted to OMB?** FY2012

**8.**

- a. Provide a brief summary of the investment and justification, including a brief description of how this closes in part or in whole an identified agency performance gap, specific accomplishments expected by the budget year and the related benefit to the mission, and the primary beneficiary(ies) of the investment.**

En Route Automation Modernization D Position and System Enhancements is currently in the planning phase with a final investment decision (which will baseline the program) planned for February 2012. This investment will provide software and infrastructure enhancements to the current ERAM system and is key to the FAA's ability to implement new services, concepts, and traffic flows to users. These new capabilities and enhancements will accommodate interfaces and integration of systems to fill some operational deficiencies that must be addressed. These deficiencies include: automation deficiencies in separation services; not taking full advantage of performance-based navigation; insufficient coordination of information between controllers; and increased information requirements for controllers. Additionally, hardware replacement and software enhancements will support increased performance and capacity requirements of the En Route Automation System and support the additional requirements from ERAM D Position and System Enhancements, ADS-B, and DataComm. This investment will bridge the gap between the end of the ERAM baseline and the NEXTGEN Mid-Term acquisition as well as provide the needed infrastructure for the Data-Position Upgrade that will enable DataComm capabilities which in turn provide improved position accuracy for flight operations. The ERAM D Position and System Enhancements interface to ADS-B will allow a reduction in the conflict probe buffer because of the availability of more accurate position and velocity information. This investment supports the FAA goal of increased capacity. The primary beneficiaries are the FAA, flying public, airline industry, Department of Defense, Department of Homeland Security and the U.S. Customs and Border Protection. Fiscal Year 2012 activities include: develop en route software enhancements including initial en route separation management capabilities, automation support for non-radar areas, Data-Position infrastructure upgrade including system engineering and software development, hardware engineering and D- Position hardware upgrades for the development laboratories and technology refreshment of the operating system at all sites at which the ERAM system is installed.

- b. Provide any links to relevant websites that would be useful to gain additional information on the investment including links to GAO and IG reports.**

Title	Link
NONE	

9.

- a. **Provide the date of the Agency's Executive/Investment Committee approval of this investment.**

2010-11-02

- b. **Provide the date of the most recent or planned approved project charter.** 2012-02-28

10. Contact information?

- a. **Program/Project Manager Name:** \*

**Phone Number:** \*

**Email:** \*

- b. **Business Function Owner Name (i.e. Executive Agent or Investment Owner):** Vincent Capezzuto

**Phone Number:** \*

**Email:** \*

**11. What project management qualifications does the Project Manager have? (choose only one per FAC-P/PM or DAWIA):** Project manager has been validated according to FAC-P/PM or DAWIA criteria as qualified for this investment.

- Project manager has been validated according to FAC-P/PM or DAWIA criteria as qualified for this investment.
- Project manager qualifications according to FAC-P/PM or DAWIA criteria is under review for this investment.
- Project manager assigned to investment, but does not meet requirements according to FAC-P/PM or DAWIA criteria.
- Project manager assigned but qualification status review has not yet started.
- No project manager has yet been assigned to this investment.

## Section B: Summary of Funding (Budget Authority for Capital Assets)

1.

Table I.B.1: Summary of Funding  
(In millions of dollars)

(Estimates for BY+1 and beyond are for planning purposes only and do not represent budget decisions)

	PY-1 and earlier	PY 2010	CY 2011 (CY Continuing Resolution)	BY 2012	BY+1 2013	BY+2 2014	BY+3 2015	BY+4 and beyond	Total
Planning:	*	*	*	*	*	*	*	*	*
Acquisition:	*	*	*	*	*	*	*	*	*
Planning & Acquisition Government FTE Costs	*	*	*	*	*	*	*	*	*
Subtotal Planning & Acquisition(DME):	*	*	*	*	*	*	*	*	*
Operations & Maintenance:	*	*	*	*	*	*	*	*	*
Disposition Costs (optional):	*	*	*	*	*	*	*	*	*
Operations, Maintenance, Disposition Government FTE Costs	*	*	*	*	*	*	*	*	*
Subtotal O&M and Disposition Costs (SS):	*	*	*	*	*	*	*	*	*
TOTAL FTE Costs	*	*	*	*	*	*	*	*	*
TOTAL (not including FTE costs):	*	*	*	*	*	*	*	*	*
TOTAL (including FTE costs):	*	*	*	*	*	*	*	*	*
Number of FTE represented by	*	*	*	*	*	*	*	*	*

**Table I.B.1: Summary of Funding**  
**(In millions of dollars)**

(Estimates for BY+1 and beyond are for planning purposes only and do not represent budget decisions)

	PY-1 and earlier	PY 2010	CY 2011 (CY Continuing Resolution)	BY 2012	BY+1 2013	BY+2 2014	BY+3 2015	BY+4 and beyond	Total
Costs:									

2. Insert the number of years covered in the column “PY-1 and earlier”:

3. Insert the number of years covered in the column “BY+4 and beyond”: \*

4. If the summary of funding has changed from the FY 2011 President’s Budget request, briefly explain those changes:

\*

## Section C: Acquisition/Contract Strategy (All Capital Assets)

1.

Table I.C.1 Contracts Table

Contract Status	Contracting Agency ID	Procurement Instrument Identifier (PIID)	Indefinite Delivery Vehicle (IDV) Reference ID	Solicitation ID	Alternative financing	EVM Required	Ultimate Contract Value (M)	Type of Contract/Task Order (Pricing)	Is the contract a Performance Based Service Acquisition (PBSA)?	Effective date	Actual or expected End Date of Contract/Task Order	Extent Completed	Short description of acquisition
Awarded		DTFAWA-C3-C-00015			*	*			N				
Awarded		<a href="#">DTFACT-09-D-00012</a>			*	*		Time and Materials	N	2009-06-16		Y	Service Operations Support (SOS) - 8
Awarded		<a href="#">DTFAWA-03-C-00071</a>			*	*		Firm Fixed Price	N	2003-10-11	2010-04-10	Y	DAFIS UDO RECONSTRUCT W/O ADVANCE
Awarded		<a href="#">DTFAWA-08-C-00009</a>			*	*		Cost Plus Award Fee	N	2008-02-21	2011-02-28	Y	This Pr will fund the FY08 NISC Contract DTFAWA-08-C-00009/Task AMC-08-06 Sub Task A-Form 337-300k Sub Task B-Eforms-650k

Table I.C.1 Contracts Table

Contract Status	Contracting Agency ID	Procurement Instrument Identifier (PIID)	Indefinite Delivery Vehicle (IDV) Reference ID	Solicitation ID	Alternative financing	EVM Required	Ultimate Contract Value (M)	Type of Contract/Task Order (Pricing)	Is the contract a Performance Based Service Acquisition (PBSA)?	Effective date	Actual or expected End Date of Contract/Task Order	Extent Completed	Short description of acquisition
													----- Total 950k

Awarded

[DTFAWA-09-C-00012](#)

\*

\*

Time and Materials

N

2008-12-24

2013-12-28

Y

Task Order  
No. 2009-1.  
Plan Number  
08-AJE1100-  
6203.

2. If earned value is not required or will not be a contract requirement for any of the contracts or task orders above, explain why:

\*

3.

- a. Has an Acquisition Plan been developed? If yes, please answer the questions that follow \*
- b. Does the Acquisition Plan reflect the requirements of FAR Subpart 7.1 \*
- c. Was the Acquisition Plan approved in accordance with agency requirements \*
- d. If "yes," enter the date of approval? \*
- e. Is the acquisition plan consistent with your agency Strategic Sustainability Performance Plan? \*
- f. Does the acquisition plan meet the requirements of EOs 13423 and 13514? \*
- g. If an Acquisition Plan has not been developed, provide a brief explanation.

\*

## Part II: IT Capital Investments

### Section A: General

1.
  - a. Confirm that the IT Program/Project manager has the following competencies: configuration management, data management, information management, information resources strategy and planning, information systems/network security, IT architecture, IT performance assessment, infrastructure design, systems integration, systems life cycle, technology awareness, and capital planning and investment control. yes
  - b. If not, confirm that the PM has a development plan to achieve competencies either by direct experience or education.
  
2. Describe the progress of evaluating cloud computing alternatives for service delivery to support this investment. FAA is considering initiatives such as the Data Center Consolidation Initiative and System Wide Information Management (SWIM) program to identify benefits, risks, and potential transition strategy associated with migrating capabilities to the cloud.
  
3. Provide the date of the most recent or planned Quality Assurance Plan 2012-02-28
  
4.
  - a. Provide the UPI of all other investments that have a significant dependency on the successful implementation of this investment.  
021-12-01-12-01-1040-00,021-12-01-14-01-1020-00,021-12-01-20-01-1230-00
  - b. If this investment is significantly dependent on the successful implementation of another investment(s), please provide the UPI(s). 021-12-01-11-01-1150-00
  
5. An Alternatives Analysis must be conducted for all Major Investments with Planning and Acquisition (DME) activities and evaluate the costs and benefits of at least three alternatives and the status quo. The details of the analysis must be available to OMB upon request. Provide the date of the most recent or planned alternatives analysis for this investment. 2012-02-28
  
6. Risks must be actively managed throughout the lifecycle of the investment. The Risk Management Plan and risk register must be available to OMB upon request. Provide the date that the risk register was last updated. 2010-08-23

## Section B: Cost and Schedule Performance

Table II.B.1. Comparison of Actual Work Completed and Actual Costs to Current Approved Baseline:

Description of Activity	DME or SS	Agency EA Transition Plan Milestone Identifier	Planned Cost (\$M)	Actual Cost (\$M)	Planned Start Date	Actual Start Date	Planned Completion Date	Actual Completion Date	Planned Percent Complete	Actual Percent Complete
Strategy Plan for program scope, content and high level milestone schedule for initial D-Position Upgrades and System Enhancements	DME	*	\$1.0	\$0.0	2011-03-01		2011-07-30		0.00%	0.00%
ERAM D-Position Upgrade and system Enhancements Final Investment Decision (FID)	DME	*	\$5.0	\$0.0	2011-03-01		2012-02-28		0.00%	0.00%
Program Management, systems engineering, software development, testing in support of of ERAM D-Position Upgrade and system enhancements. This milestone will be broken out into greater detail after FID	DME	*	*	*	2012-01-01	*	2017-09-30	*	*	*
In Service support for of ERAM D-Position Upgrade and system enhancements.	SS	*	*	*	2012-01-01	*	2017-09-30	*	*	*



Table II.B.1. Comparison of Actual Work Completed and Actual Costs to Current Approved Baseline:

Description of Activity	DME or SS	Agency EA Transition Plan Milestone Identifier	Planned Cost (\$M)	Actual Cost (\$M)	Planned Start Date	Actual Start Date	Planned Completion Date	Actual Completion Date	Planned Percent Complete	Actual Percent Complete
This milestone will be broken out into greater detail after FID										

2. If the investment cost, schedule, or performance variances are not within 10 percent of the current baseline, provide a complete analysis of the reasons for the variances, the corrective actions to be taken, and the most likely estimate at completion.

3. For mixed lifecycle or operations and maintenance investments an Operational Analysis must be performed annually. Operational analysis may identify the need to redesign or modify an asset by identifying previously undetected faults in design, construction, or installation/integration, highlighting whether actual operation and maintenance costs vary significantly from budgeted costs, or documenting that the asset is failing to meet program requirements. The details of the analysis must be available to OMB upon request. Insert the date of the most recent or planned operational analysis.

4. Did the Operational analysis cover all 4 areas of analysis: Customer Results, Strategic and Business Results, Financial Performance, and Innovation?

Section C: Financial Management Systems

Table II.C.1: Financial Management Systems			
System(s) Name	System acronym	Type of Financial System	BY Funding
*	*	*	*

Section D: Multi-Agency Collaboration Oversight (For Multi-Agency Collaborations only)

Table II.D.1. Customer Table:	
Customer Agency	Joint exhibit approval date
NONE	

Table II.D.2. Shared Service Providers		
Shared Service Provider (Agency)	Shared Service Asset Title	Shared Service Provider Exhibit 53 UPI (BY 2011)
*	*	*

Table II.D.3. For IT Investments, Partner Funding Strategies (\$millions):							
Partner Agency	Partner exhibit 53 UPI (BY 2012)	CY Monetary Contribution	CY “In-Kind” Contribution	CY Fee-for-Service	BY Monetary Contribution	BY “In-Kind” Contribution	BY Fee-for-Service
NONE							

Table II.D.4. Legacy Systems Being Replaced		
Name of the Legacy Investment of Systems	Current UPI	Date of the System Retirement
*	*	*

## Section E: Performance Information

Table I.E.1a. Performance Metric Attributes

Measurement Area (For IT Assets)	Measurement Grouping (For IT Assets)	Measurement Indicator	Reporting Frequency	Unit of Measure	Performance Measure Direction	Baseline	Year Baseline Established for this measure (Origination Date)
Technology	Technology Improvement	Identify target performance improvement for D Position upgrades.	annual	number of categories and targets	Increase	ERAM System Performance Baseline	2011-06-30
			Fiscal Year	Target	Actual Results	Target "Met" or "Not Met"	Last Updated
			2011	Identify at least 1 goal and initial target for Technology		Not Due	2011-02-25
Customer Results	Customer Satisfaction	Identify the categories and initial targets for customer benefits.	annual	number of categories and targets	Increase	ERAM System Performance Baseline	2011-06-30
			Fiscal Year	Target	Actual Results	Target "Met" or "Not Met"	Last Updated
			2011	Identify at least 1 goal and initial target for customer benefits		Not Due	2011-02-25
Mission and Business Results	Air Transportation	Identify the categories and initial targets for D Position upgrades.	annual	number of categories and targets	Increase	ERAM System Performance Baseline	2011-06-30
			Fiscal Year	Target	Actual Results	Target "Met" or "Not Met"	Last Updated
			2011	Identify at least 1 goal and initial target for mission and business results		Not Due	2011-02-25
Processes and Activities	Timeliness	Identify the process improvement areas for D Position upgrades.	annual	number of categories and targets	Decrease	ERAM System Performance Baseline	2011-06-30

			Fiscal Year	Target	Actual Results	Target "Met" or "Not Met"	Last Updated
Technology	Technology Improvement	Validate target performance improvement for D Position upgrades.	2011	Identify at least 1 goal and initial target for Processes and Activities		Not Due	2011-02-25
			annual	number of categories and targets	Increase	ERAM System Performance Baseline	2011-06-30
			Fiscal Year	Target	Actual Results	Target "Met" or "Not Met"	Last Updated
			2012	Identify at least 1 goal and initial target for Technology		Not Due	2011-02-25
			annual	number of categories and targets	Increase	ERAM System Performance Baseline	2011-06-30
			Fiscal Year	Target	Actual Results	Target "Met" or "Not Met"	Last Updated
Customer Results	Customer Satisfaction	Validate the categories and initial targets for customer benefits.	2012	Identify at least 1 goal and initial target for customer benefits		Not Due	2011-02-25
			annual	number of categories and targets	Increase	ERAM System Performance Baseline	2011-06-30
			Fiscal Year	Target	Actual Results	Target "Met" or "Not Met"	Last Updated
Mission and Business Results	Air Transportation	Validate the categories and initial targets for D Position upgrades.	2012	Identify at least 1 goal and initial target for mission and business results		Not Due	2011-02-25
			annual	number of categories and targets	Increase	ERAM System Performance Baseline	2011-06-30
			Fiscal Year	Target	Actual Results	Target "Met" or "Not Met"	Last Updated
Processes and Activities	Timeliness	Validate the process improvement areas for D Position upgrades.	2012	Identify at least 1 goal and initial target for mission and business results		Not Due	2011-02-25
			annual	number of categories and targets	Decrease	ERAM System Performance Baseline	2011-06-30
			Fiscal Year	Target	Actual Results	Target "Met" or "Not Met"	Last Updated

2012

Identify at least 1 goal  
and initial target for  
Processes and Activities

Not Due

2011-02-25

\* - Indicates data is redacted.